REMARKS

As a preliminary matter, with regard to the drawings, Applicant has included herewith a marked-up copy of Figure 3, with the proposed changes in red. This drawing change merely changes the term "CIRCUI" to the term "CIRCUIT." Approval of the proposed drawing change is respectfully requested. Also enclosed is a formal drawing sheet including the same drawing change.

The Specification and Drawings stand objected for the lack of the inclusion of the terms "first power supply" and "second power supply." Applicant has amended pages 6 and 7 of the Specification to recite that the luminance inclination circuit 1 is one example of the "first power supply" and the power holding circuit 2 is one example of the "second power supply." As these claim terms now have clear antecedent basis in the Specification, withdrawal of this objection to the Specification is respectfully requested. Further, as the luminance inclination circuit 1 and the power holding circuit 2, which are examples of the first power supply and the second power supply, respectively, are clearly shown in the drawings, withdrawal of this objection to the drawings is respectfully requested.

The Examiner also requested clarification of whether Figure 5 is prior art or if it is the present invention. Figure 5 shows waveforms of the prior art. However, as indicated in the Specification (page 5 lines 5-12), these prior art waveforms represent the first power supply in the present invention, which is used in combination with a second power supply. The Examiner is reminded that most inventions are combinations of known elements. *See, e.g.*, Intel Corp. v. United States Int'l Trade Comm'n, 946 F.2d 821, 842, 20 USPQ2d 1161,

1179 (Fed. Cir. 1991) ("Virtually all inventions are combinations, and virtually all are combinations of old elements."). Thus, the inclusion of a known element, such as the prior art waveforms of Figure 5, in the present invention, in combination with other elements, should not cause confusion. Accordingly, withdrawal of this objection to Figure 5 is also requested.

Claims 1-16 stand rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. Applicant respectfully traverses this rejection because the terms at issue (first power supply and second power supply) have been added to the Specification, near an example of the components in each type of power supply. Accordingly, withdrawal of this rejection is respectfully requested.

Claims 1-11, 13, and 14 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 6,151,016 to Kanbe et al. Applicant respectfully traverses this rejection.

Applicant respectfully submits that the Kanbe et al. reference fails to disclose all of the features of the present invention. More specifically, the Kanbe et al. reference fails to disclose a liquid crystal display device that includes, *inter alia*, a power supply changeover circuit that "directly detects" the cut off of the input power supply and changes from a first power supply to a second power supply when the input power supply that is fed to the liquid crystal display device is cut off, as defined in independent Claims 1 and 8.

Applicant's Figures 1 and 2A show one example of a power supply changeover circuit 3, which is used to change from a first power supply (luminance inclination circuit 1)

to a second power supply (power holding circuit 2) when power changeover circuit 3 directly detects that the input power (Vin) has been cut off. More specifically, as can be seen in Applicant's Figure 2A, this embodiment of power supply changeover circuit 3 includes four resistors (R1 to R4), two n-channel transistors (NT1 and NT2), and one p-channel transistor (FET) PT1. The resistors R1 and R2 are connected in series between electrodes on one side of the capacitors (C1 and C2) and the ground. The resistance values of the resistors R1 and R2 are selected such that the transistor NT1 can be turned on when the device power supply Vin is off (i.e., when the device power supply Vin is cut off). The drain of the transistor NT2 is connected to a mutual connection point (node NA) between the resistors R1 and R2, with a source thereof being connected to the ground, and a gate thereof being fed with the device power supply Vin. Further, the resistors R3 and R4 are connected in series between electrodes on one side of the capacitors (C1 and C2) and a drain of the transistor NT1. A gate of the transistor NT1 is connected to the node NA and a source thereof is connected to the ground. A source of the transistor PT1 is connected to the electrodes on one side of the capacitors (C1 and C2), with a drain thereof being connected to the gate-on power supply terminal Vgon of the gate driving circuit 4, and a gate thereof being connected to a mutual connection point (a node NB) between the resistances R3 and R4.

In the Figure 2A embodiment, when the voltage value of the device power supply Vin is higher than a predetermined voltage value (high level), the potential of the node NA turns to low level (zero V), so that the node NB turns to a high level to turn off the transistor PT1. Consequently, the output voltage of the luminance inclination circuit 1 is

supplied to the gate-on power supply terminal Vgon. On the other hand, when the voltage value of the device power supply Vin is equal to or lower than the predetermined voltage value (low level), the potential of the node NA turns to the high level, so that the node NB turns to low level to turn on the transistor PT1. Further, the gate clock signal GCLK and the luminance inclination circuit control signal XGCLK are shut off (suspended) in accordance with the decrease in the voltage value of the device power supply Vin. Consequently, the output voltage of the power holding circuit 2 is supplied to the gate-on power supply terminal Vgon. Thus, as can be seen by the Figure 2A embodiment of the invention, the power supply changeover circuit 2 directly detects the cut off in the input power supply, and then changes from the first power supply (such as luminance inclination circuit 1) to the second power supply (such as power holding circuit 2).

In contrast, the device of Kanbe et al. lacks a power supply changeover circuit that directly detects the cut off of the input power supply and changes between first and second power supplies. In the Office Action, the Examiner equated power source control circuit 56 of Figure 13 of Kanbe et al. with the claimed power supply changeover circuit. *See* January 22, 2007 Office Action, page 6, lines 8-9. However, power source control circuit 56 of Kanbe et al. does not change from a first power supply to a second power supply, as in Claim 1, nor does it selectively output one of the first power supply and the second power supply, as in Claim 8. Instead, power source control circuit 56 of Kanbe et al. merely opens/closes relay switch 60 from the main power source when it detects that the liquid crystal display has been turned on/off via judging switch 58. *See* Kanbe et al., col. 15, lines

51-63. Although power source control circuit 56 delays turning off relay switch 60 for a predetermined period after judging switch 58 is turned off, there is no switching between first and second power sources, as in the present invention of independent Claims 1 and 8.

The Examiner asserted that the Figure 1 embodiment of Kanbe et al. switches between a first power supply 14 and a second power supply 10. However, even assuming *arguendo* that main power source 14 and auxiliary power source 10 could be considered as the claimed first and second power supplies, the Figure 1 embodiment of Kanbe et al. does not satisfy independent Claims 1 and 8 because it lacks a power supply changeover circuit that "directly detects" the cut off of the input power supply. Instead, microcomputer 11 generates and outputs a power source OFF signal. The power source OFF signal is not a direct detection of the cut off of the input power supply (such as through the use of the resistors and transistors of the power supply changeover circuit 3 of the present invention), but is instead indirect through the use of a signal generated by a microcomputer.

Accordingly, as all of the features of independent Claims 1, 8 and 17 are not disclosed in the Kanbe et al. reference, Applicant respectfully requests the withdrawal of this §102(b) rejection of independent Claims 1 and 8, and associated dependent Claims 2-7, 9-11, 13 and 14.

Claims 15 and 16 stand rejected under 35 U.S.C. §103 as being unpatentable over Kanbe et al. in view of United States Patent No. 7,023,511 to Lee. Applicant respectfully traverses this rejection.

Claims 15 and 16 both depend from independent Claim 1, and therefore include all of the features of Claim 1, plus additional features. Accordingly, Applicant respectfully requests that the §103 rejection of dependent Claims 15 and 16 under Kanbe et al. in view of Lee be withdrawn considering the above remarks directed to independent Claim 1, and also because the Lee reference does not remedy the deficiencies discussed above, nor was it relied upon as such.

Claims 12, 17 and 18 stand rejected under 35 U.S.C. §103 as being unpatentable over Kanbe et al. in view of United States Patent No. 4,779,956 to Nemoto et al. Applicant respectfully traverses this rejection.

Claim 12 depends from independent Claim 1, and therefore includes all of the features of Claim 1, plus additional features. Accordingly, Applicant respectfully requests that the §103 rejection of dependent Claims 15 and 16 under Kanbe et al. in view of Nemoto et al. be withdrawn considering the above remarks directed to independent Claim 1, and also because the Nemoto et al. reference does not remedy the deficiencies discussed above, nor was it relied upon as such. Further, the Nemoto et al. reference differs from the invention of Claims 12, 17 and 18 because, in Nemoto et al., luminance unevenness occurring in the upper and lower directions of the display is solved by lowering the gate-off voltage. On the other hand, in one example of the present invention of Claims 12, 17, and 18, in the luminance inclination circuit, a gate-on pulse is blunted from the beginning so as to reduce luminance transition on the right and left sides. Thus, the luminance inclination circuit of Claims 12, 17 and 18 is different from that of Nemoto et al.

With regard to independent Claim 17 and associated dependent Claim 18, Applicant respectfully submits that the Kanbe et al. reference fails to disclose or suggest the claimed power supply changeover circuit that "directly detects" the cut off of the input power supply and changes from a first power supply to a second power supply when the input power supply that is fed to the liquid crystal display device is cut off, as defined in independent Claim 17, for the same reasons discussed above with regard to the §102 rejection of independent Claims 1 and 8. Additionally, the Nemoto et al. reference does not remedy this deficiency, nor was it relied upon as such. Accordingly, withdrawal of this §103 rejection of Claims 17 and 18 is respectfully requested.

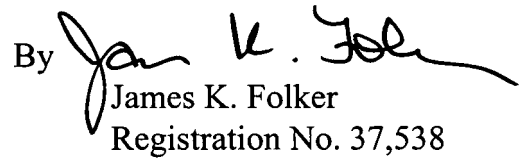
Applicant has also added new dependent Claims 19-27, which Applicant submits are also allowable over the cited references for at least the reasons discussed above with regard to their associated independent claims.

For all of the above reasons, Applicant requests reconsideration and allowance of the claimed invention. Should the Examiner be of the opinion that a telephone conference

would aid in the prosecution of the application, or that outstanding issues exist, the Examiner is invited to contact the undersigned.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By 
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In the Drawings:

Please approve the drawing changes as shown in red on the attached marked-up copy of Figure 3. This drawing change merely changes the term "CIRCUI" to the term "CIRCUIT." A formal drawing sheet including the same change is also enclosed.

FIG. 3